

Appl. No. 10/757,893
Amdt. dated March 30, 2006
Reply to Office action of December 30, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended): A duct board material, comprising:
a substantially rigid fiber glass board having an interior surface and an exterior surface;
an exterior facing adhered to the exterior surface; and
a bonded, non-woven glass mat facing adhered to the interior surface, the mat having a plurality of parallel or substantially parallel fibers oriented in a longitudinal direction of the duct board material.
2. (Original): The duct board material of claim 1, wherein the mat facing comprises a plurality of parallel or substantially parallel yarns.
3. (Original): The duct board material of claim 2, wherein the plurality of parallel or substantially parallel yarns are embedded in the non-woven mat facing.
4. (Original): The duct board material of claim 3, wherein the yarns are embedded in the mat facing without slack.
5. (Original): The duct board material of claim 1, wherein the mat facing has a plurality of fibers preferentially oriented in the longitudinal direction.
6. (Original): The duct board of claim 5, wherein the mat facing has a ratio of machine direction tensile strength to cross direction tensile strength of at least 2:1.
7. (Original): The duct board material of claim 1, wherein the exterior facing is a second bonded, non-woven mat facing having a plurality of parallel or substantially parallel fibers oriented in the longitudinal direction of the duct board material.

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8. (Original): The duct board material of claim 1, wherein the exterior facing comprises a foil-scrim-kraft layer.
9. (Original): The duct board material of claim 1, wherein the non-woven mat facing includes glass filaments in a resinous binder.
10. (Original): The duct board material of claim 1, wherein:
the exterior facing comprises a foil-scrim-kraft layer,
the non-woven mat facing includes glass filaments in a resinous binder, and
the mat facing has a plurality of parallel or substantially parallel yarns embedded therein without slack.
11. (Currently Amended): A duct board material, comprising:
a rigid fiber glass board having an interior surface and an exterior surface;
an exterior facing adhered to the exterior surface; and
a bonded, non-woven glass mat facing adhered to the interior surface, the mat having a plurality of parallel fibers oriented in a longitudinal direction of the duct board material.
12. (Currently Amended): A duct board material, comprising:
a substantially rigid fiber glass board having an interior surface and an exterior surface;
an exterior facing adhered to the exterior surface; and
a plurality of parallel or substantially parallel fibers oriented in a longitudinal direction of the duct board material and adhered directly to the interior surface.
13. (Original): The duct board material of claim 12, wherein the parallel or substantially parallel fibers are adhered to the fiber glass board using an adhesive or resin.
14. (Original): The duct board material of claim 12, wherein the parallel or substantially parallel fibers are fiber glass yarns.

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15. (Original): The duct board material of claim 12, wherein the exterior facing is a bonded, non-woven mat facing having a plurality of parallel or substantially parallel fibers oriented in the longitudinal direction of the duct board material.

16. (Original): The duct board material of claim 12, wherein the exterior facing comprises a foil-scrim-kraft layer.

17. (Withdrawn): A method for forming ~~a~~the duct board of claim 1, comprising the steps of:
(a) forming ~~a~~the substantially rigid fiber glass board having ~~an~~the interior surface and ~~an~~the exterior surface;
(b) adhering ~~an~~the exterior facing to the exterior surface; and
(c) adhering ~~a~~the bonded, non-woven mat facing to the interior surface, ~~the mat facing having a plurality of parallel or substantially parallel fibers oriented in a longitudinal direction of the duct board material.~~

18. (Withdrawn): The method of claim 17, wherein the mat facing comprises a plurality of parallel or substantially parallel yarns.

19. (Withdrawn): The method of claim 18, further comprising forming the non-woven mat facing with the plurality of parallel or substantially parallel yarns embedded therein.

20. (Withdrawn): The method of claim 19, wherein the step of forming the non-woven mat facing includes removing slack from the yarns.

21. (Withdrawn): The method of claim 18, wherein the step of forming the non-woven mat facing includes feeding the yarns from one of the group consisting of a warp beam and a creel.

22. (Withdrawn): The method of claim 17, wherein step (c) is performed before the duct board enters a curing oven.

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23. (Withdrawn): The method of claim 17, wherein step (c) is performed after the duct board exits a curing oven.

24. (Withdrawn): The method of claim 17, wherein the mat facing has a plurality of fibers predominantly oriented in the longitudinal direction.

25. (Withdrawn): The method of claim 17, wherein the exterior facing is a second bonded, non-woven mat facing having a plurality of parallel or substantially parallel fibers oriented in the longitudinal direction of the board material.

26. (Withdrawn): A method for forming a the duct board of claim 12, comprising the steps of:

- (a) forming a the substantially rigid fiber glass board having an the interior surface and an the exterior surface;
- (b) adhering an the exterior facing to the exterior surface; and
- (c) adhering a the plurality of parallel or substantially parallel fibers to the interior surface; ~~the plurality of parallel or substantially parallel fibers oriented in a longitudinal direction of the duct board material.~~

27. (Withdrawn): The method of claim 26, wherein the parallel or substantially parallel fibers are included in a plurality of parallel yarns.

28. (Withdrawn): The method of claim 26, wherein step (c) includes removing slack from the yarns.

29. (Withdrawn): The method of claim 26, wherein step (c) includes feeding the yarns from one of the group consisting of a warp beam and a creel.

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30. (Withdrawn): The method of claim 26, wherein step (c) is performed before the duct board enters a curing oven.
31. (Withdrawn): The method of claim 26, wherein step (c) is performed after the duct board exits a curing oven.
32. (New): The duct board material of claim 1, wherein the material is formed into a rectangular duct with the mat facing on an interior side thereof and the exterior facing on an exterior side thereof.